

What is claimed is:

1. A method of load-balancing a network comprising the steps of:

establishing a primary LNS, a peer LNS and a LAC, wherein said primary LNS includes

5 state information;

coupling the primary LNS, the peer LNS, and the LAC to a network;

transmitting first information from said CPE to said LAC;

establishing a first tunnel between said LAC and said primary LNS and transmitting said

first information through said tunnel;

10 determining whether said primary LNS is overloaded;

offloading said state information directly from said primary LNS to said peer LNS via

said network;

in response to said determining step, establishing a second tunnel from said LAC to said

peer LNS using said state information; and

15 transmitting second information from said CPE to said LAC and through said second

tunnel.

2. The method of claim 1 comprising the further step of:

requesting a switchover from a primary LNS to a peer LNS.

3. The method of claim 1 comprising the further step of:

detecting whether the primary LNS is inoperative.

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4. A method of providing high availability in a network comprising the steps of:
establishing a primary LNS, a peer LNS and a LAC, said primary LNS including state information;

5 coupling the primary LNS and the peer LNS to a network;
transmitting first information from said CPE to said LAC;
establishing a first tunnel between said LAC and said primary LNS and transmitting first information through said tunnel;

determining whether said primary LNS is functioning;
10 directly offloading state information from said primary LNS to said the peer LNS:
in response to said determining step, establishing a second tunnel from said CPE to said peer LNS using said state information; and

transmitting second information from said CPE to said LAC,
transmitting information through said second tunnel.

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5. A system for achieving load balancing comprising:
a first network;
a LAC coupled to said first network;
a primary LNS, said primary LNS including state information and a peer LNS, said
20 primary LNS and said peer LNS being coupled to said first network;
a CPE coupled to said LAC;
wherein said primary LNS transfers state information directly to said peer LNS; and

wherein said primary LNS sends said LAC a request to switchover to said peer LNS upon the detection of an overload condition.

6. The system of claim 5 wherein said primary LNS sends a switchover request to said LAC.

7. The system of claim 6 wherein said LAC sends a switchover reply in response to receiving said switchover request.

8. The system of claim 5 wherein said LAC determines whether said primary LNS is operative.

9. A system comprising:
a primary LNS, said primary LNS including state information;
a peer LNS;
a network, said primary LNS and said peer LNS coupled to said network; and
means for offloading said state information directly from said primary LNS to said peer LNS.

10. A system comprising:
a access concentrator;

a primary network server, said primary network server having associated state information;

a peer network server;

a network coupled to said primary network server, said access concentrator, and said peer
5 network server wherein said primary network server directly downloads state information to said
peer network server.

11. The system of claim 10 wherein said primary network server requests the access
concentrator that said peer network server become activated.

12. The system of claim 11 wherein said access concentrator determines whether said
primary network server is inoperative.

13. The system of claim 10 further comprising CPE, wherein said CPE is coupled to said
15 access concentrator.

14. The system of claim 10 further including a first tunnel between said access
concentrator and said primary server, said tunnel carrying information